

METHOD AND SYSTEM FOR GENERIC DATA TRANSFER INTERFACE**Abstract of the Disclosure**

According to one embodiment of the present invention, a data storage device comprises a
5 generic host interface and a media controller. The host interface has a channel select bit encoder to
assert one or more channel select bits to be decoded by the media controller to indicate one or more
virtual channels through which the host interface will communicate with the media controller over a
data bus. A virtual channel controller in the host interface establishes a peer-to-peer connection with
a virtual channel controller in the media controller based on the virtual channel indicated by the one
10 or more channel select bits. A communication controller in the host interface implements a
communication protocol for communication with a host and transfers data to and from the media
controller via the peer-to-peer connection based on the communication with the host.